



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087719.341	09/25/96	MANNAVA	13DV-12522

ANDREW C HESS
GENERAL ELECTRIC COMPANY
ONE NEUMANN WAY M D H17
CINCINNATI OH 45215-6301

QM61/0608

EXAMINER
VERDIER, C

ART UNIT	PAPER NUMBER
3745	

DATE MAILED: 06/08/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/719,341

Applicant(s)
Mannava et al.

Examiner
Christopher Verdier

Group Art Unit
3745



☒ Responsive to communication(s) filed on Mar 13, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-20 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 3401

Applicants' Amendment dated March 13, 1998 has been carefully considered but is deemed non-persuasive. Claims 1-20 are pending. The objection to figure 1 as not utilizing hatching to indicate the sectional portions is withdrawn as a result of an informal telephone interview on February 19, 1998. Applicants have amended the claims to correct the informalities noted in the previous Office action. Applicants have amended the claims in response to the rejections under 35 USC 112, second paragraph set forth in the previous Office action and have overcome all of these rejections except for the rejection of claims 17-19.

Applicants have submitted a declaration under 37 C.F.R. 1.131(b) to attempt to remove the Mannava 5,591,009 patent as a reference against the claims of the instant application. This declaration has been considered but is ineffective to overcome the Mannava reference for the reasons set forth later below. In light of this, the examiner notes that the independent claims 1, 6, 11, and 16 have been amended to positively recite that the airfoil is that of a compressor in the body of the claims. While claims 1-8, 11-13, and 16-18 are no longer rejectable under 35 U.S.C. 102(e) as being anticipated by Mannava 5,591,009, the claims are obvious in view of Neal as set forth later below.

The examiner has carefully considered Applicants' arguments that the combination of Neal and the American Machinist Article teach against the present invention and has found these

Art Unit: 3401

arguments to be persuasive for the reasons articulated on pages 7-10 and page 11, first two paragraphs of Applicants' Response.

With regard to the double patenting rejections, Applicants have argued that the amendments to independent claims 1, 6, 11, and 16 overcome the double patenting rejections. Applicants have also argued that the claims in Mannava '009 are patentably distinct from the claims of the instant application. The examiner disagrees because the claimed subject matter of the instant application is obvious in view of the claims of Mannava '009 in view of Neal. Applicants have also argued that the claims of Mannava '570 are patentably distinct from the claims of the instant application and state that a two-way analysis is required because the date of Mannava '570 is later than the date of the instant application as set forth in *In re Goodman*. The examiner disagrees because since the declaration is ineffective, the Mannava '570 patent and the instant application have the same effective filing date. In addition, Applicants may wish to consider the following policy with regard to Terminal Disclaimers in GATT Effective Date Cases:

Effective June 8 1995, any continuing application of a previously filed application will expire twenty years from the filing date of the earlier filed case. A terminal disclaimer is still required to overcome a nonstatutory double patenting rejection in a continuing application, even though both patents would expire on the same day anyway because of the twenty-year-term provisions under GATT/NAFTA. The reason is that the enforceability/common ownership

Art Unit: 3401

provision of a terminal disclaimer under 37 CFR 1.321(C)(3) remains. A terminal disclaimer includes a provision that the later filed application which matures into a patent shall only be enforceable as long as the earlier and later filed patents are commonly owned. If and when the patents cease to be commonly owned, the patent containing the terminal disclaimer does not expire, but it becomes unenforceable. This would avoid the problem of an alleged infringer being harassed by two different parties with patents covering the same patentable invention (as defined in 37 CFR 1.601(n)).

Likewise, if two copending applications are claiming the same patentable invention and were filed on the same day, and therefore, if granted, will expire on the same day, but do not have any continuing relationship under 35 U.S.C. 120, any double patenting rejections in those applications would require a terminal disclaimer to be overcome.

If two copending applications claiming the same patentable invention were filed on different dates, and patents were granted thereon, they would both have separate twenty-year terms and would expire on different dates. In order to overcome a double patenting rejection in those applications, a terminal disclaimer would be needed for both its term and enforceability disclaimer provisions.

Art Unit: 3401

Declaration Under 37 CFR 1.131

The declaration filed on March 13, 1998 under 37 CFR 1.131 has been considered but is ineffective to overcome the Mannava 5,591,009 reference.

The Mannava 5,591,009 reference is a U.S. patent that claims the rejected invention. An affidavit or declaration is inappropriate under 37 CFR 1.131(a) when the patent is claiming the same patentable invention, see MPEP § 2306. Note that the same patentable invention is defined in MPEP 715.05 as when the invention is considered obvious under 35 USC 103. The specification limitation in the instant application of the peening depth of 20 to 50 mils is considered obvious.

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Mannava '009 reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). Applicants state that Exhibit A is a sketch showing a gas turbine engine compressor airfoil having a laser shock peened surface on the leading edge. Applicants also state that an Invention Disclosure Statement was disclosed to General Electric Company no later than May 14, 1994 as shown in exhibit A. In items 4 and 5,

Art Unit: 3401

Applicants state that on March 1, 1995 and March 3, 1995, Applicants assigned all rights in their patent application to the General Electric Company. However, exhibit A has not been provided to the examiner. Without documentary evidence such as sketches, blueprints, or drawings, these allegations of fact cannot be supported. See MPEP 715.07.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Mannava '009 reference to either a constructive reduction to practice or an actual reduction to practice. The declaration does not include any evidence of or statement alleging establishment of diligence from a date prior to the date of reduction to practice of the Mannava reference to either a constructive reduction to practice or an actual reduction to practice.

The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Mannava '009 reference. The declaration does not include any evidence of or statement alleging establishment of a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Mannava reference.

Claim Rejections - 35 USC § 112

Art Unit: 3401

Claims 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 17, line 19, "third regions" is a double recitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannava '009 in view of Neal. Mannava '009 discloses a repaired laser shock peened gas turbine engine

Art Unit: 3401

component substantially as claimed, but does not disclose that the component is a compressor blade.

Neal (column 2, lines 65-68) teaches compressor blades may be peened for the purpose of reducing compressor blade fatigue.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize the repaired laser shock peened gas turbine engine component of Mannava for the compressor blades as taught by Neal for the purpose of reducing compressor blade fatigue.

Double Patenting

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 3401

Claims 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, and 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 3, 1, 3, 1, 1, 3, 1, 1, 3, 1, 1, and 3 of U.S. Patent No. 5,591,009 in view of Neal. Claims 1 and 3 of US Patent '009 claim substantially the same subject matter as the instant application except for the gas turbine engine component being a compressor blade, and except for a residual stress depth of 20-50 mils.

Neal (column 2, lines 65-68) teaches compressor blades may be peened for the purpose of reducing compressor blade fatigue.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the gas turbine engine component of Mannava as the compressor blades as taught by Neal for the purpose of reducing compressor blade fatigue.

The recitation of the specific laser shock peening residual stress of 20-50 mils is deemed to be a matter of choice in design. It would have been obvious to a person having ordinary skill in the art to select such a depth, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Art Unit: 3401

Claims 9-10, 14-15, and 19-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4, 4, 4, 4, 4, and 4, respectively, of U.S. Patent No. 5,591,009 in view of Neal. Claim 4 of US Patent '009 claims substantially the same subject matter as the instant application except for the gas turbine engine component being a compressor blade, and except for a residual stress depth of 20-50 mils.

Neal (column 2, lines 65-68) teaches compressor blades may be peened for the purpose of reducing compressor blade fatigue.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the gas turbine engine component of Mannava as the compressor blades as taught by Neal for the purpose of reducing compressor blade fatigue.

The recitation of the specific laser shock peening residual stress of 20-50 mils is deemed to be a matter of choice in design. It would have been obvious to a person having ordinary skill in the art to select such a depth, since has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Art Unit: 3401

Claims 1-20 are also rejected under the judicially created doctrine of double patenting over claims 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, and 1, respectively, of U. S. Patent No. 5,531,570 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: All of the limitations in claim 1, lines 1-12 of US Patent 5,531,570.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 3401


MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Verdier whose telephone number is (703) 308-2638. The examiner can normally be reached on Monday-Friday from 9:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on (703) 308-1044. The fax phone number for this Group is (703) 305-3588.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

CV
June 5, 1998


Christopher Verdier
Primary Examiner
Art Unit 3745